Th Claims Defining th Inv ntion ar as Foll ws

1. An extraction apparatus for a machine having a tool for performing a working operation on a workpiece and a drive motor for driving the tool, the drive motor having an exhaust through which an exhaust fluid is discharged during operation of the drive motor, the extraction apparatus comprising a shroud disposed about the tool for containing dust generated thereby, and an extraction line, the extraction line communicating with the shroud for intake of air within the shroud, the extraction line further communicating with the exhaust of the drive motor for receiving exhaust fluid generated thereby, whereby there is confluence of the air and the exhaust fluid.

2. An extraction apparatus according to claim 1 wherein the shroud is movable to accommodate changes in orientation of the apparatus with respect to the workpiece.

3. An extraction apparatus according to claim 2 wherein the extraction line incorporates a flexible section to accommodate the movement of the shroud.

4. An extraction apparatus according to claim 1 wherein the extraction line is adapted for connection to a suction source such as a vacuum pump.

5. An extraction apparatus according to claim 1 further comprising a delivery means for delivering a dust suppression fluid into the shroud.

6. An extraction apparatus according to claim 5 wherein the delivery means comprises a flexible fluid delivery line.

7. An extraction apparatus according to claim 1 further comprising injection means for injecting a cooling fluid into the extraction line.

8. An extraction apparatus according to claim 7 wherein the dust suppression fluid and the cooling fluid comprise water.

9. An extraction apparatus according to claim 6 the extraction line is connected to a suction source by way of a suction hose and wherein the suction hose and the fluid delivery line are connected together for handling as a single unit.

10. An extraction apparatus for a machine having a tool for performing a working operation on a workpiece and a drive motor for driving the tools, the drive motor having an exhaust through which an exhaust fluid is discharged during operation of the drive motor, the extraction apparatus comprising a means for delivering a dust suppression fluid to the vicinity of the tool for suppression of dust generated thereby, a shroud disposed about the tool for containing the dust and the dust suppression fluid, and an extraction line, the extraction line communicating with the shroud for extracting dust and dust suppression fluid contained by the shroud, the extraction line also communicating with the exhaust of the drive motor for receiving the exhaust fluid generated thereby.

11. A machine for performing a working operation on a workpiece, the machine comprising a tool receiving means for receiving a tool for performing the working operation, a drive motor operable to drive the tool, the drive motor having an exhaust through which an exhaust fluid is discharged during operation, a shroud disposed about the tool for containing dust, and an extraction line, the extraction line communicating with the shroud for intake of air within the shroud, the extraction line further communicating with the exhaust of the drive motor for receiving the exhaust fluid discharging therefrom, whereby there is confluence of the air and the exhaust fluid.

12. A machine according to claim 11 further comprising a delivery means for delivering a dust suppression fluid into the shroud.

13. A machine according to claim 12 wherein the delivery means comprises an inlet opening onto the interior of the shroud whereby the dust suppression fluid is delivered into the shroud.

14. A machine according to claim 11 wherein the drive motor is an internal combustion engine and wherein the exhaust fluid comprises exhaust gases from the combustion process of the engine.

15. A machine for performing a working operation on a workpiece, the machine comprising a tool receiving means for receiving a tool for performing the working operation, a drive motor operable to drive the tool, the drive motor having an exhaust through which an exhaust fluid is discharged during operation, means for delivering a dust suppression fluid into the vicinity of the tool for suppressing dust generated thereby, a shroud disposed about the tool for containing dust and the dust suppression fluid, and an extraction line, the extraction line communicating with the shroud for extracting dust and dust suppression fluid contained thereby, the extraction line further communicating with the exhaust of the drive motor for receiving the exhaust fluid discharging therefrom.

16. An extraction apparatus for a machine having an internal combustion engine from which hot exhaust gases are discharged during operation thereof, the extraction apparatus comprising a body defining an outlet, an air inlet communicating with the outlet, flow means to induce flow between the outlet and the inlet from the inlet to the outlet, and an exhaust gas inlet communicating with the outlet, whereby in use there is confluence of incoming air and exhaust gas.

17. An extraction apparatus according to claim 16 wherein the body defines a flow passage leading to the outlet, with the air inlet and the exhaust gas inlet both opening onto the flow passage.

18. An extraction apparatus according to claim 17 wherein the flow passage comprises an axial passage, with the air inlet being at one end thereof and the outlet being at the other end thereof.

19. An extraction apparatus according to claim 18 wherein the exhaust gas inlet is arranged to deliver exhaust gas into the flow passage downstream of the air inlet.

20. An extraction apparatus according to claim 19 wherein the exhaust gas inlet is configured to deliver exhaust gas into the flow passage in a flow direction corresponding to the axial flow direction of the air.

21. An extraction apparatus according to claim 16 wherein the body has provision for water flow in heat exchange relationship therewith for cooling purposes.

22. An extraction apparatus according to claim 17 wherein a water jacket is disposed about the passage for heat exchange contact therewith.

23. An extraction apparatus according to claim 16 further comprising injection means for injection of water into the flow passage for assisting cooling of the exhaust gas.

24. An extraction apparatus according to claim 23 wherein the injection means comprises at least one water injection port in the side wall of the flow passage.

25. An extraction apparatus according to claim 24 wherein the at least one injection port is adapted to receive water for injection from the water jacket in the body.

26. A machine for performing a working operation on a workpiece, the machine comprising a tool receiving means for receiving a tool for performing the working operation, an internal combustion engine operable to drive the tool, the engine having an exhaust through which exhaust gas is discharged during operation, a body defining an outlet for connection to a suction source, the outlet being connected for fluid communication with the engine exhaust, and an air inlet connected for fluid communication with the outlet, whereby in use there is confluence of incoming air and exhaust gas.